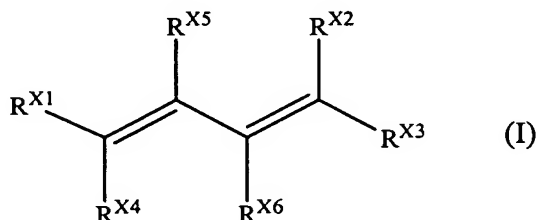


IN THE CLAIMS

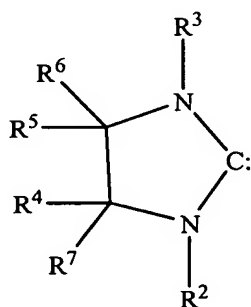
Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the catalytic telomerization of an acyclic ~~olefins~~ olefin having at least two conjugated double bonds (I)

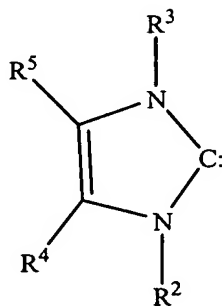


with at least one nucleophile,

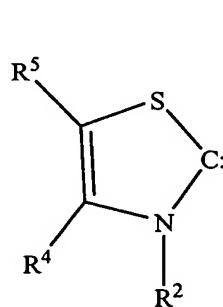
wherein ~~mixtures~~ a mixture of 1,3-butadiene with other C₃-, C₄- and/or C₅-hydrocarbons are used as said acyclic ~~olefins~~ olefin having at least two conjugated double bonds, with alkynes and if appropriate 1,2-butadiene being removed prior to the telomerization reaction, and one or more complexes comprising one or more metals of groups 8 to 10 of the Periodic Table of the Elements and at least one carbene ligand having one of the formulae



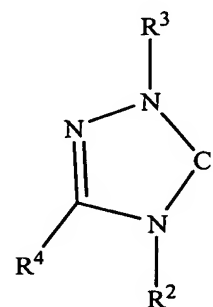
(III)



(IV)



(V)



(VI)

where

R^{X1}, R^{X2}, R^{X3}, R^{X4}, R^{X5}, R^{X6}: are each H

R², R³: are identical or different and are each a) a linear, branched, substituted or unsubstituted cyclic or alicyclic alkyl group having from 1 to 24 carbon atoms,

or b) a substituted or unsubstituted, monocyclic or polycyclic aryl group having from 6 to 24 carbon atoms

or c) a monocyclic or polycyclic, substituted or unsubstituted heterocycle having from 4 to 24 carbon atoms and at least one heteroatom from the group consisting of N, O, and S,

R^4 , R^5 , R^6 , R^7 : are identical or different and are each

hydrogen, alkyl, aryl, heteroaryl, -CN, -COOH, -COO-alkyl, -COO-aryl, -OCO-alkyl, -OCO-aryl, -OCOO-alkyl, -OCOO-aryl, -CHO, -CO-alkyl, -CO-aryl, -O-alkyl, -O-aryl, -NH₂, -NH(alkyl), -N(alkyl)₂, -NH(aryl), -N(alkyl)₂, -F, -Cl, -Br, -I, -OH, -CF₃, -NO₂, -ferrocenyl, -SO₃H, -PO₃H₂, where the alkyl groups have 1-24 carbon atoms and the aryl groups have from 5 to 24 carbon atoms and the radicals R^4 and R^5 may also be part of a bridging aliphatic or aromatic ring,

~~with the proviso that~~ wherein when the metal of groups 8 to 10 of the Periodic Table is Pd, R^2 and/or R^3 ~~have~~ having the meaning c), are used as catalyst.

Claim 2 (Currently Amended): The process as claimed in claim 1, wherein R^2 , R^3 , R^4 , R^5 , R^6 and R^7 are identical or different and have at least one substituent selected from the group consisting of -H, -CN, -COOH, -COO-alkyl, -COO-aryl, -OCO-alkyl, -OCO-aryl, -OCOO-alkyl, -OCOO-aryl, -CHO, -CO-alkyl, -CO-aryl, -aryl, -alkyl, -alkenyl, -allyl, -O-alkyl, -O-aryl, ~~NH₂~~, NH₂, -NH(alkyl), -N(alkyl)₂, -NH(aryl), ~~N(alkyl)₂~~, N(alkyl)₂, -F, -Cl, -Br, -I, -OH, ~~CF₃~~, CF₃, -NO₂, -ferrocenyl, ~~SO₃H~~, SO₃H, and ~~PO₃H₂~~, PO₃H₂, ~~where~~ wherein the alkyl groups have from 1 to 24, the alkenyl groups have from 2 to 24 carbon atoms, the allyl groups have from 3 to 24 carbon atoms and the aryl groups have from 5 to 24 carbon atoms.

Claim 3 (Currently Amended): The process as claimed in claim 1-~~or~~2, wherein a nucleophile of the formula (II)



where Z is O, N(R^{1''}), S(O₂), Si(R^{1''})(OH), C=O, C(H₂), C(H)(NO₂) or N(CH₂CH=CH₂) and R¹, R^{1'} or R^{1''} are identical or different and are each H, a substituted or unsubstituted, linear, branched or cyclic alkyl or alkenyl group having from 1 to 22 carbon atoms, a carboxyl group or an aryl group, where the radicals R¹, R^{1'} may be joined to one another via covalent bonds and R¹ and R^{1'} may bear identical or different substituents.

Claim 4 (Currently Amended): The process as claimed in ~~at least one of claims 1 to 3~~ claim 1, wherein compounds of the formula (IIa) or (IIb)



where R¹, R^{1'} are identical or different and are each H, a substituted or unsubstituted, linear, branched or cyclic alkyl or alkenyl group having from 1 to 22 carbon atoms, a carboxyl group or an aryl group and the radicals R¹, R^{1'} may be joined to one another via covalent bonds, are used as nucleophile.

Claim 5 (Currently Amended): The process as claimed in ~~any of claims 1 to 4~~ claim 1, wherein water, one or more alcohols, one or more phenols, one or more polyols, one or more carboxylic acids, one or more ammonia and/or one or more primary or secondary amines are used as nucleophiles.

Claim 6 (Currently Amended): The process as claimed in ~~any of claims 1 to 5~~ claim 1 carried out in a solvent, where the nucleophile (II) and/or inert organic solvents is/are used as solvent.

Claim 7 (Currently Amended): The process as claimed in ~~any of claims 1 to 6~~ claim
1, wherein the ratio of carbene ligand to metal ~~{mol/mol}~~ (mol/mol) is from 0.01:1 to 250:1.